

RECEIVED  
CENTRAL FAX CENTER

NOV 18 2005

PTO/SB/21 (09-04)

Approved for use through 07/31/2006. OMB 0651-0031  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

<b>TRANSMITTAL FORM</b> (to be used for all correspondence after initial filing)	Application Number	09/768,458	
	Filing Date	1/25/2001	
	First Named Inventor	Kraft et al.	
	Art Unit	3677	
	Examiner Name	JACKSON, ANDRE L.	
Total Number of Pages In This Submission	29	Attorney Docket Number	ARC920000101US1

ENCLOSURES (Check all that apply)		
<input checked="" type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment/Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/Declaration(s) <input type="checkbox"/> Extension of Time <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation, Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____ <input type="checkbox"/> Landscape Table on CD	<input type="checkbox"/> After Allowance Communication to <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input checked="" type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input type="checkbox"/> Other Enclosure(s) (please identify below):
Remarks		

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT			
Firm Name	Lacasse & Associates, LLC		
Signature	<i>Ramraj Soundararajan</i>		
Printed Name	Ramraj Soundararajan		
Date	November 18, 2005	Reg. No.	53832

CERTIFICATE OF TRANSMISSION/MAILING			
I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below.			
Signature	<i>Amanda Cogar</i>		
Typed or printed name	Amanda Cogar	Date	November 18, 2005

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

BEST AVAILABLE COPY

RECEIVED  
CENTRAL FAX CENTER

NOV 18 2005

**FEE TRANSMITTAL  
for FY 2005**

Effective 10/01/2004. Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT \$500.00

**Complete If Known**

Application Number	09/768,458
Filing Date	1/25/2001
First Named Inventor	Kraft et al.
Examiner Name	Jackson, Andre L.
Art Unit	3677
Attorney Docket No.	ARC920000101US1

METHOD OF PAYMENT				FEE CALCULATION (continued)																																																																																																																																																																																					
<input type="checkbox"/> Check <input type="checkbox"/> Credit Card <input type="checkbox"/> Money Order <input type="checkbox"/> Other <input checked="" type="checkbox"/> Deposit Account:				<b>3. ADDITIONAL FEES</b>																																																																																																																																																																																					
Deposit Account Number: 09-0441 Deposit Account Name: IBM CORPORATION				<table border="1"> <thead> <tr> <th colspan="2">Large Entity</th> <th colspan="2">Small Entity</th> <th rowspan="2">Fee Description</th> <th rowspan="2">Fee Paid</th> </tr> <tr> <th>Fee Code</th> <th>Fee (\$)</th> <th>Fee Code</th> <th>Fee (\$)</th> </tr> </thead> <tbody> <tr> <td>1051</td> <td>130</td> <td>2051</td> <td>65</td> <td>Surcharge - late filing fee or oath</td> <td></td> </tr> <tr> <td>1052</td> <td>50</td> <td>2052</td> <td>25</td> <td>Surcharge - late provisional filing fee or cover sheet</td> <td></td> </tr> <tr> <td>1053</td> <td>130</td> <td>1053</td> <td>130</td> <td>Non-English specification</td> <td></td> </tr> <tr> <td>1812</td> <td>2,520</td> <td>1812</td> <td>2,520</td> <td>For filing a request for <i>ex parte</i> reexamination</td> <td></td> </tr> <tr> <td>1804</td> <td>920*</td> <td>1804</td> <td>920*</td> <td>Requesting publication of SIR prior to Examiner action</td> <td></td> </tr> <tr> <td>1805</td> <td>1,840*</td> <td>1805</td> <td>1,840*</td> <td>Requesting publication of SIR after Examiner action</td> <td></td> </tr> <tr> <td>1251</td> <td>110</td> <td>2251</td> <td>55</td> <td>Extension for reply within first month</td> <td></td> </tr> <tr> <td>1252</td> <td>430</td> <td>2252</td> <td>215</td> <td>Extension for reply within second month</td> <td></td> </tr> <tr> <td>1253</td> <td>980</td> <td>2253</td> <td>490</td> <td>Extension for reply within third month</td> <td></td> </tr> <tr> <td>1254</td> <td>1,530</td> <td>2254</td> <td>765</td> <td>Extension for reply within fourth month</td> <td></td> </tr> <tr> <td>1255</td> <td>2,080</td> <td>2255</td> <td>1,040</td> <td>Extension for reply within fifth month</td> <td></td> </tr> <tr> <td>1401</td> <td>340</td> <td>1401</td> <td>170</td> <td>Notice of Appeal</td> <td></td> </tr> <tr> <td>1402</td> <td>340</td> <td>2402</td> <td>170</td> <td>Filing a brief in support of an appeal</td> <td>500</td> </tr> <tr> <td>1403</td> <td>300</td> <td>2403</td> <td>150</td> <td>Request for oral hearing</td> <td></td> </tr> <tr> <td>1451</td> <td>1,610</td> <td>1452</td> <td>1,610</td> <td>Petition to institute a public use proceeding</td> <td></td> </tr> <tr> <td>1452</td> <td>110</td> <td>2452</td> <td>55</td> <td>Petition to revive - unavoidable</td> <td></td> </tr> <tr> <td>1453</td> <td>1,330</td> <td>2453</td> <td>665</td> <td>Petition to revive - unintentional</td> <td></td> </tr> <tr> <td>1501</td> <td>1,370</td> <td>2501</td> <td>685</td> <td>Utility issue fee (or reissue)</td> <td></td> </tr> <tr> <td>1502</td> <td>490</td> <td>2502</td> <td>245</td> <td>Design issue fee</td> <td></td> </tr> <tr> <td>1503</td> <td>880</td> <td>2503</td> <td>330</td> <td>Plant issue fee</td> <td></td> </tr> <tr> <td>1460</td> <td>130</td> <td>1460</td> <td>130</td> <td>Petitions to the Commissioner</td> <td></td> </tr> <tr> <td>1807</td> <td>50</td> <td>1807</td> <td>50</td> <td>Processing fee under 37 CFR 1.17(q)</td> <td></td> </tr> <tr> <td>1808</td> <td>180</td> <td>1808</td> <td>180</td> <td>Submission of Information Disclosure Stmt</td> <td></td> </tr> <tr> <td>8021</td> <td>40</td> <td>8021</td> <td>40</td> <td>Recording each patent assignment per property (times number of properties)</td> <td></td> </tr> <tr> <td>1809</td> <td>790</td> <td>2809</td> <td>395</td> <td>Filing a submission after final rejection (37 CFR 1.129(a))</td> <td></td> </tr> <tr> <td>1810</td> <td>790</td> <td>2810</td> <td>395</td> <td>For each additional invention to be examined (37 CFR 1.129(b))</td> <td></td> </tr> <tr> <td>1801</td> <td>790</td> <td>2801</td> <td>395</td> <td>Request for Continued Examination (RCE)</td> <td></td> </tr> <tr> <td>1802</td> <td>900</td> <td>1802</td> <td>900</td> <td>Request for expedited examination of a design application</td> <td></td> </tr> </tbody> </table>				Large Entity		Small Entity		Fee Description	Fee Paid	Fee Code	Fee (\$)	Fee Code	Fee (\$)	1051	130	2051	65	Surcharge - late filing fee or oath		1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet		1053	130	1053	130	Non-English specification		1812	2,520	1812	2,520	For filing a request for <i>ex parte</i> reexamination		1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action		1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action		1251	110	2251	55	Extension for reply within first month		1252	430	2252	215	Extension for reply within second month		1253	980	2253	490	Extension for reply within third month		1254	1,530	2254	765	Extension for reply within fourth month		1255	2,080	2255	1,040	Extension for reply within fifth month		1401	340	1401	170	Notice of Appeal		1402	340	2402	170	Filing a brief in support of an appeal	500	1403	300	2403	150	Request for oral hearing		1451	1,610	1452	1,610	Petition to institute a public use proceeding		1452	110	2452	55	Petition to revive - unavoidable		1453	1,330	2453	665	Petition to revive - unintentional		1501	1,370	2501	685	Utility issue fee (or reissue)		1502	490	2502	245	Design issue fee		1503	880	2503	330	Plant issue fee		1460	130	1460	130	Petitions to the Commissioner		1807	50	1807	50	Processing fee under 37 CFR 1.17(q)		1808	180	1808	180	Submission of Information Disclosure Stmt		8021	40	8021	40	Recording each patent assignment per property (times number of properties)		1809	790	2809	395	Filing a submission after final rejection (37 CFR 1.129(a))		1810	790	2810	395	For each additional invention to be examined (37 CFR 1.129(b))		1801	790	2801	395	Request for Continued Examination (RCE)		1802	900	1802	900	Request for expedited examination of a design application	
Large Entity		Small Entity		Fee Description	Fee Paid																																																																																																																																																																																				
Fee Code	Fee (\$)	Fee Code	Fee (\$)																																																																																																																																																																																						
1051	130	2051	65	Surcharge - late filing fee or oath																																																																																																																																																																																					
1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet																																																																																																																																																																																					
1053	130	1053	130	Non-English specification																																																																																																																																																																																					
1812	2,520	1812	2,520	For filing a request for <i>ex parte</i> reexamination																																																																																																																																																																																					
1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action																																																																																																																																																																																					
1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action																																																																																																																																																																																					
1251	110	2251	55	Extension for reply within first month																																																																																																																																																																																					
1252	430	2252	215	Extension for reply within second month																																																																																																																																																																																					
1253	980	2253	490	Extension for reply within third month																																																																																																																																																																																					
1254	1,530	2254	765	Extension for reply within fourth month																																																																																																																																																																																					
1255	2,080	2255	1,040	Extension for reply within fifth month																																																																																																																																																																																					
1401	340	1401	170	Notice of Appeal																																																																																																																																																																																					
1402	340	2402	170	Filing a brief in support of an appeal	500																																																																																																																																																																																				
1403	300	2403	150	Request for oral hearing																																																																																																																																																																																					
1451	1,610	1452	1,610	Petition to institute a public use proceeding																																																																																																																																																																																					
1452	110	2452	55	Petition to revive - unavoidable																																																																																																																																																																																					
1453	1,330	2453	665	Petition to revive - unintentional																																																																																																																																																																																					
1501	1,370	2501	685	Utility issue fee (or reissue)																																																																																																																																																																																					
1502	490	2502	245	Design issue fee																																																																																																																																																																																					
1503	880	2503	330	Plant issue fee																																																																																																																																																																																					
1460	130	1460	130	Petitions to the Commissioner																																																																																																																																																																																					
1807	50	1807	50	Processing fee under 37 CFR 1.17(q)																																																																																																																																																																																					
1808	180	1808	180	Submission of Information Disclosure Stmt																																																																																																																																																																																					
8021	40	8021	40	Recording each patent assignment per property (times number of properties)																																																																																																																																																																																					
1809	790	2809	395	Filing a submission after final rejection (37 CFR 1.129(a))																																																																																																																																																																																					
1810	790	2810	395	For each additional invention to be examined (37 CFR 1.129(b))																																																																																																																																																																																					
1801	790	2801	395	Request for Continued Examination (RCE)																																																																																																																																																																																					
1802	900	1802	900	Request for expedited examination of a design application																																																																																																																																																																																					
<b>1. BASIC FILING FEE</b>				SUBTOTAL (1) \$ 0																																																																																																																																																																																					
<table border="1"> <thead> <tr> <th colspan="2">Large Entity</th> <th colspan="2">Small Entity</th> <th rowspan="2">Fee Description</th> <th rowspan="2">Fee Paid</th> </tr> <tr> <th>Fee Code</th> <th>Fee (\$)</th> <th>Fee Code</th> <th>Fee (\$)</th> </tr> </thead> <tbody> <tr> <td>1001</td> <td>790</td> <td>2001</td> <td>395</td> <td>Utility filing fee</td> <td></td> </tr> <tr> <td>1002</td> <td>350</td> <td>2002</td> <td>175</td> <td>Design filing fee</td> <td></td> </tr> <tr> <td>1003</td> <td>550</td> <td>2003</td> <td>275</td> <td>Plant filing fee</td> <td></td> </tr> <tr> <td>1004</td> <td>790</td> <td>2004</td> <td>395</td> <td>Reissue filing fee</td> <td></td> </tr> <tr> <td>1005</td> <td>180</td> <td>2005</td> <td>80</td> <td>Provisional filing fee</td> <td></td> </tr> </tbody> </table>				Large Entity		Small Entity		Fee Description	Fee Paid	Fee Code	Fee (\$)	Fee Code	Fee (\$)	1001	790	2001	395	Utility filing fee		1002	350	2002	175	Design filing fee		1003	550	2003	275	Plant filing fee		1004	790	2004	395	Reissue filing fee		1005	180	2005	80	Provisional filing fee		<b>2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE</b>																																																																																																																																													
Large Entity		Small Entity		Fee Description	Fee Paid																																																																																																																																																																																				
Fee Code	Fee (\$)	Fee Code	Fee (\$)																																																																																																																																																																																						
1001	790	2001	395	Utility filing fee																																																																																																																																																																																					
1002	350	2002	175	Design filing fee																																																																																																																																																																																					
1003	550	2003	275	Plant filing fee																																																																																																																																																																																					
1004	790	2004	395	Reissue filing fee																																																																																																																																																																																					
1005	180	2005	80	Provisional filing fee																																																																																																																																																																																					
Total Claims: 20** = <input type="checkbox"/> X <input type="checkbox"/> = <input type="checkbox"/> Independent Claims: 3** = <input type="checkbox"/> X <input type="checkbox"/> = <input type="checkbox"/> Multiple Dependent: <input type="checkbox"/> = <input type="checkbox"/>				SUBTOTAL (2) \$ 0																																																																																																																																																																																					
<table border="1"> <thead> <tr> <th colspan="2">Large Entity</th> <th colspan="2">Small Entity</th> <th rowspan="2">Fee Description</th> <th rowspan="2">Fee Paid</th> </tr> <tr> <th>Fee Code</th> <th>Fee (\$)</th> <th>Fee Code</th> <th>Fee (\$)</th> </tr> </thead> <tbody> <tr> <td>1202</td> <td>18</td> <td>2202</td> <td>9</td> <td>Claims in excess of 20</td> <td></td> </tr> <tr> <td>1201</td> <td>88</td> <td>2201</td> <td>44</td> <td>Independent claims in excess of 3</td> <td></td> </tr> <tr> <td>1203</td> <td>300</td> <td>2203</td> <td>150</td> <td>Multiple dependent claim, if not paid</td> <td></td> </tr> <tr> <td>1204</td> <td>88</td> <td>2204</td> <td>44</td> <td>** Reissue independent claims over original patent</td> <td></td> </tr> <tr> <td>1205</td> <td>18</td> <td>2205</td> <td>9</td> <td>** Reissue claims in excess of 20 and over original patent</td> <td></td> </tr> </tbody> </table>				Large Entity		Small Entity		Fee Description	Fee Paid	Fee Code	Fee (\$)	Fee Code	Fee (\$)	1202	18	2202	9	Claims in excess of 20		1201	88	2201	44	Independent claims in excess of 3		1203	300	2203	150	Multiple dependent claim, if not paid		1204	88	2204	44	** Reissue independent claims over original patent		1205	18	2205	9	** Reissue claims in excess of 20 and over original patent		SUBTOTAL (3) \$ 500																																																																																																																																													
Large Entity		Small Entity		Fee Description	Fee Paid																																																																																																																																																																																				
Fee Code	Fee (\$)	Fee Code	Fee (\$)																																																																																																																																																																																						
1202	18	2202	9	Claims in excess of 20																																																																																																																																																																																					
1201	88	2201	44	Independent claims in excess of 3																																																																																																																																																																																					
1203	300	2203	150	Multiple dependent claim, if not paid																																																																																																																																																																																					
1204	88	2204	44	** Reissue independent claims over original patent																																																																																																																																																																																					
1205	18	2205	9	** Reissue claims in excess of 20 and over original patent																																																																																																																																																																																					

\*\*or number previously paid, if greater. For Reissues, see above

Other fee (specify):

\*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) \$500

Name	Ramraj Soundararajan	Registration No. (Attorney/Agent)	53832	Telephone	703-838-7683
Signature	<i>Ramraj Soundararajan</i>	Date	11/18/2005		

BEST AVAILABLE COPY

COPY

**FEE TRANSMITTAL  
for FY 2005**

Effective 10/01/2004. Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT \$500.00

**Complete if Known**

Application Number 09/768,458  
 Filing Date 1/25/2001  
 First Named Inventor Kraft et al.  
 Examiner Name Jackson, Andre L.  
 Art Unit 3677  
 Attorney Docket No. ARC920000101US1

METHOD OF PAYMENT		FEE CALCULATION (continued)																																																																																																																																																																															
<input type="checkbox"/> Check <input type="checkbox"/> Credit Card <input type="checkbox"/> Money Order <input type="checkbox"/> Other <input checked="" type="checkbox"/> Deposit Account: Deposit Account Number 09-0441 Deposit Account Name IBM CORPORATION The Director is authorized to: (check all that apply) <input checked="" type="checkbox"/> Charge fee(s) indicated below <input checked="" type="checkbox"/> Credit any overpayments <input checked="" type="checkbox"/> Charge any additional fee(s) or any underpayment of fee(s) <input type="checkbox"/> Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.		<b>3. ADDITIONAL FEES</b> <table border="1"> <thead> <tr> <th>Large Entity Fee Code</th> <th>Large Entity Fee (\$)</th> <th>Small Entity Fee Code</th> <th>Small Entity Fee (\$)</th> <th>Fee Description</th> <th>Fee Paid</th> </tr> </thead> <tbody> <tr><td>1051</td><td>130</td><td>2051</td><td>65</td><td>Surcharge - late filing fee or oath</td><td></td></tr> <tr><td>1052</td><td>50</td><td>2052</td><td>25</td><td>Surcharge - late provisional filing fee or cover sheet</td><td></td></tr> <tr><td>1053</td><td>130</td><td>1053</td><td>130</td><td>Non-English specification</td><td></td></tr> <tr><td>1812</td><td>2,520</td><td>1812</td><td>2,520</td><td>For filing a request for <i>ex parte</i> reexamination</td><td></td></tr> <tr><td>1804</td><td>920*</td><td>1804</td><td>920*</td><td>Requesting publication of SIR prior to Examiner action</td><td></td></tr> <tr><td>1805</td><td>1,840*</td><td>1805</td><td>1,840*</td><td>Requesting publication of SIR after Examiner action</td><td></td></tr> <tr><td>1251</td><td>110</td><td>2251</td><td>55</td><td>Extension for reply within first month</td><td></td></tr> <tr><td>1252</td><td>430</td><td>2252</td><td>215</td><td>Extension for reply within second month</td><td></td></tr> <tr><td>1253</td><td>980</td><td>2253</td><td>490</td><td>Extension for reply within third month</td><td></td></tr> <tr><td>1254</td><td>1,530</td><td>2254</td><td>765</td><td>Extension for reply within fourth month</td><td></td></tr> <tr><td>1255</td><td>2,080</td><td>2255</td><td>1,040</td><td>Extension for reply within fifth month</td><td></td></tr> <tr><td>1401</td><td>340</td><td>1401</td><td>170</td><td>Notice of Appeal</td><td></td></tr> <tr><td>1402</td><td>340</td><td>2402</td><td>170</td><td>Filing a brief in support of an appeal</td><td>500</td></tr> <tr><td>1403</td><td>300</td><td>2403</td><td>150</td><td>Request for oral hearing</td><td></td></tr> <tr><td>1461</td><td>1,510</td><td>1452</td><td>1,510</td><td>Petition to institute a public use proceeding</td><td></td></tr> <tr><td>1452</td><td>110</td><td>2452</td><td>55</td><td>Petition to revive - unavoidable</td><td></td></tr> <tr><td>1463</td><td>1,330</td><td>2453</td><td>665</td><td>Petition to revive - unintentional</td><td></td></tr> <tr><td>1501</td><td>1,370</td><td>2501</td><td>685</td><td>Utility issue fee (or reissue)</td><td></td></tr> <tr><td>1502</td><td>490</td><td>2502</td><td>245</td><td>Design issue fee</td><td></td></tr> <tr><td>1503</td><td>680</td><td>2503</td><td>330</td><td>Plant issue fee</td><td></td></tr> <tr><td>1460</td><td>130</td><td>1480</td><td>130</td><td>Petitions to the Commissioner</td><td></td></tr> <tr><td>1807</td><td>50</td><td>1807</td><td>50</td><td>Processing fee under 37 CFR 1.17(q)</td><td></td></tr> <tr><td>1808</td><td>180</td><td>1808</td><td>180</td><td>Submission of Information Disclosure Stmt</td><td></td></tr> <tr><td>8021</td><td>40</td><td>8021</td><td>40</td><td>Recording each patent assignment per property (times number of properties)</td><td></td></tr> <tr><td>1809</td><td>760</td><td>2809</td><td>395</td><td>Filing a submission after final rejection (37 CFR 1.129(a))</td><td></td></tr> <tr><td>1810</td><td>760</td><td>2810</td><td>395</td><td>For each additional invention to be examined (37 CFR 1.129(b))</td><td></td></tr> <tr><td>1801</td><td>780</td><td>2801</td><td>395</td><td>Request for Continued Examination (RCE)</td><td></td></tr> <tr><td>1802</td><td>900</td><td>1802</td><td>900</td><td>Request for expedited examination of a design application</td><td></td></tr> </tbody> </table>		Large Entity Fee Code	Large Entity Fee (\$)	Small Entity Fee Code	Small Entity Fee (\$)	Fee Description	Fee Paid	1051	130	2051	65	Surcharge - late filing fee or oath		1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet		1053	130	1053	130	Non-English specification		1812	2,520	1812	2,520	For filing a request for <i>ex parte</i> reexamination		1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action		1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action		1251	110	2251	55	Extension for reply within first month		1252	430	2252	215	Extension for reply within second month		1253	980	2253	490	Extension for reply within third month		1254	1,530	2254	765	Extension for reply within fourth month		1255	2,080	2255	1,040	Extension for reply within fifth month		1401	340	1401	170	Notice of Appeal		1402	340	2402	170	Filing a brief in support of an appeal	500	1403	300	2403	150	Request for oral hearing		1461	1,510	1452	1,510	Petition to institute a public use proceeding		1452	110	2452	55	Petition to revive - unavoidable		1463	1,330	2453	665	Petition to revive - unintentional		1501	1,370	2501	685	Utility issue fee (or reissue)		1502	490	2502	245	Design issue fee		1503	680	2503	330	Plant issue fee		1460	130	1480	130	Petitions to the Commissioner		1807	50	1807	50	Processing fee under 37 CFR 1.17(q)		1808	180	1808	180	Submission of Information Disclosure Stmt		8021	40	8021	40	Recording each patent assignment per property (times number of properties)		1809	760	2809	395	Filing a submission after final rejection (37 CFR 1.129(a))		1810	760	2810	395	For each additional invention to be examined (37 CFR 1.129(b))		1801	780	2801	395	Request for Continued Examination (RCE)		1802	900	1802	900	Request for expedited examination of a design application	
Large Entity Fee Code	Large Entity Fee (\$)	Small Entity Fee Code	Small Entity Fee (\$)	Fee Description	Fee Paid																																																																																																																																																																												
1051	130	2051	65	Surcharge - late filing fee or oath																																																																																																																																																																													
1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet																																																																																																																																																																													
1053	130	1053	130	Non-English specification																																																																																																																																																																													
1812	2,520	1812	2,520	For filing a request for <i>ex parte</i> reexamination																																																																																																																																																																													
1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action																																																																																																																																																																													
1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action																																																																																																																																																																													
1251	110	2251	55	Extension for reply within first month																																																																																																																																																																													
1252	430	2252	215	Extension for reply within second month																																																																																																																																																																													
1253	980	2253	490	Extension for reply within third month																																																																																																																																																																													
1254	1,530	2254	765	Extension for reply within fourth month																																																																																																																																																																													
1255	2,080	2255	1,040	Extension for reply within fifth month																																																																																																																																																																													
1401	340	1401	170	Notice of Appeal																																																																																																																																																																													
1402	340	2402	170	Filing a brief in support of an appeal	500																																																																																																																																																																												
1403	300	2403	150	Request for oral hearing																																																																																																																																																																													
1461	1,510	1452	1,510	Petition to institute a public use proceeding																																																																																																																																																																													
1452	110	2452	55	Petition to revive - unavoidable																																																																																																																																																																													
1463	1,330	2453	665	Petition to revive - unintentional																																																																																																																																																																													
1501	1,370	2501	685	Utility issue fee (or reissue)																																																																																																																																																																													
1502	490	2502	245	Design issue fee																																																																																																																																																																													
1503	680	2503	330	Plant issue fee																																																																																																																																																																													
1460	130	1480	130	Petitions to the Commissioner																																																																																																																																																																													
1807	50	1807	50	Processing fee under 37 CFR 1.17(q)																																																																																																																																																																													
1808	180	1808	180	Submission of Information Disclosure Stmt																																																																																																																																																																													
8021	40	8021	40	Recording each patent assignment per property (times number of properties)																																																																																																																																																																													
1809	760	2809	395	Filing a submission after final rejection (37 CFR 1.129(a))																																																																																																																																																																													
1810	760	2810	395	For each additional invention to be examined (37 CFR 1.129(b))																																																																																																																																																																													
1801	780	2801	395	Request for Continued Examination (RCE)																																																																																																																																																																													
1802	900	1802	900	Request for expedited examination of a design application																																																																																																																																																																													
<b>FEE CALCULATION</b> <b>1. BASIC FILING FEE</b> <table border="1"> <thead> <tr> <th>Large Entity Fee Code</th> <th>Large Entity Fee (\$)</th> <th>Small Entity Fee Code</th> <th>Small Entity Fee (\$)</th> <th>Fee Description</th> <th>Fee Paid</th> </tr> </thead> <tbody> <tr><td>1001</td><td>790</td><td>2001</td><td>395</td><td>Utility filing fee</td><td></td></tr> <tr><td>1002</td><td>350</td><td>2002</td><td>175</td><td>Design filing fee</td><td></td></tr> <tr><td>1003</td><td>550</td><td>2003</td><td>275</td><td>Plant filing fee</td><td></td></tr> <tr><td>1004</td><td>790</td><td>2004</td><td>395</td><td>Reissue filing fee</td><td></td></tr> <tr><td>1005</td><td>160</td><td>2005</td><td>80</td><td>Provisional filing fee</td><td></td></tr> </tbody> </table> SUBTOTAL (1) \$ 0 <b>2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE</b> <table border="1"> <thead> <tr> <th>Total Claims</th> <th>Extra Claims</th> <th>Fee from below</th> <th>Fee Paid</th> </tr> </thead> <tbody> <tr> <td>-20** =</td> <td>X</td> <td></td> <td></td> </tr> <tr> <td>-3** =</td> <td>X</td> <td></td> <td></td> </tr> </tbody> </table> <b>3. ADDITIONAL FEES</b> <table border="1"> <thead> <tr> <th>Large Entity Fee Code</th> <th>Large Entity Fee (\$)</th> <th>Small Entity Fee Code</th> <th>Small Entity Fee (\$)</th> <th>Fee Description</th> <th>Fee Paid</th> </tr> </thead> <tbody> <tr><td>1202</td><td>18</td><td>2202</td><td>9</td><td>Claims in excess of 20</td><td></td></tr> <tr><td>1201</td><td>88</td><td>2201</td><td>44</td><td>Independent claims in excess of 3</td><td></td></tr> <tr><td>1203</td><td>300</td><td>2203</td><td>150</td><td>Multiple dependent claim if not paid</td><td></td></tr> <tr><td>1204</td><td>88</td><td>2204</td><td>44</td><td>** Reissue independent claims over original patent</td><td></td></tr> <tr><td>1205</td><td>18</td><td>2205</td><td>9</td><td>** Reissue claims in excess of 20 and over original patent</td><td></td></tr> </tbody> </table> SUBTOTAL (2) \$ 0 **or number previously paid, if greater; For Reissues, see above		Large Entity Fee Code	Large Entity Fee (\$)	Small Entity Fee Code	Small Entity Fee (\$)	Fee Description	Fee Paid	1001	790	2001	395	Utility filing fee		1002	350	2002	175	Design filing fee		1003	550	2003	275	Plant filing fee		1004	790	2004	395	Reissue filing fee		1005	160	2005	80	Provisional filing fee		Total Claims	Extra Claims	Fee from below	Fee Paid	-20** =	X			-3** =	X			Large Entity Fee Code	Large Entity Fee (\$)	Small Entity Fee Code	Small Entity Fee (\$)	Fee Description	Fee Paid	1202	18	2202	9	Claims in excess of 20		1201	88	2201	44	Independent claims in excess of 3		1203	300	2203	150	Multiple dependent claim if not paid		1204	88	2204	44	** Reissue independent claims over original patent		1205	18	2205	9	** Reissue claims in excess of 20 and over original patent		Other fee (specify): SUBTOTAL (3) \$500																																																																																											
Large Entity Fee Code	Large Entity Fee (\$)	Small Entity Fee Code	Small Entity Fee (\$)	Fee Description	Fee Paid																																																																																																																																																																												
1001	790	2001	395	Utility filing fee																																																																																																																																																																													
1002	350	2002	175	Design filing fee																																																																																																																																																																													
1003	550	2003	275	Plant filing fee																																																																																																																																																																													
1004	790	2004	395	Reissue filing fee																																																																																																																																																																													
1005	160	2005	80	Provisional filing fee																																																																																																																																																																													
Total Claims	Extra Claims	Fee from below	Fee Paid																																																																																																																																																																														
-20** =	X																																																																																																																																																																																
-3** =	X																																																																																																																																																																																
Large Entity Fee Code	Large Entity Fee (\$)	Small Entity Fee Code	Small Entity Fee (\$)	Fee Description	Fee Paid																																																																																																																																																																												
1202	18	2202	9	Claims in excess of 20																																																																																																																																																																													
1201	88	2201	44	Independent claims in excess of 3																																																																																																																																																																													
1203	300	2203	150	Multiple dependent claim if not paid																																																																																																																																																																													
1204	88	2204	44	** Reissue independent claims over original patent																																																																																																																																																																													
1205	18	2205	9	** Reissue claims in excess of 20 and over original patent																																																																																																																																																																													

Name	Ramraj Soundararajan	Registration No. (Attorney/Agent)	53832	Telephone	703-838-7683
Signature	Ramraj Soundararajan			Date	11/18/2005

COPY

NOV 18 2005

Serial No. 09/768,458  
Group Art Unit 3677  
Docket No: ARC920000101US1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPEAL BRIEF- 37 C.F.R. 1.192

U.S. Patent Application 09/768,458 entitled,

"ENHANCING SALES FOR SERVICE PROVIDERS BY UTILIZING  
AN OPPORTUNISTIC APPROACH BASED ON AN UNEXPECTED  
CHANGE IN SCHEDULE OF SERVICES (TIME, LOCATION)"

**Real Party in Interest:** International Business Machines Corporation

Serial No. 09/768,458  
Group Art Unit 3677  
Docket No: ARC920000101US1

**Related Appeals and Interferences:**

An Appeal Brief was previously submitted on May 03, 2004 with respect to the pending case (Serial No. 09/768,458). Based on the arguments presented in the Appeal Brief of May 03, 2004, the examiner withdrew the Final Rejection of 01/02/2004 and issued a new non-final office action on 04/07/2005.

**Status of Claims:**

Claims 1-13 and 15-33 are pending.

Claims 1, 2, 5-10, 12, 15-17, 19-28, 32, and 33 stand rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent 6,810,527 to **Conrad et al.**

Claims 3, 4, 11, 13, 18, and 29-31 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over **Conrad et al.**

**Status of Amendments:**

No After-Final amendments were submitted.

**Summary of Claimed Subject Matter:**

The present invention provides for a system (*figure 4*) to enhance sales for service providers by utilizing an opportunistic approach based on an unexpected change in a schedule of service, wherein the system comprises: an event retriever (*figure 4, 402*) generating an event pair which comprises a target value and an actual value associated with the schedule of services (*page 14, line 13 – page 18, line 4*); an event observer (*figure 4, 404*) receiving the event pairs from the event retriever, calculating the difference between said actual and target value, and based on one or more rules from a first set of rules, identifying and notifying a window of opportunity detector regarding potential windows of opportunities, wherein each potential window of opportunity defines a time period of customer inactivity (*page 18, lines 6-18*); a window of opportunity detector (*figure 4, 406*) which receives said potential windows opportunities, detects, based on one or more rules from a set of second rules, if a window of opportunity exists, and if so, matches said detected windows of opportunities with service providers for the purposes of providing a new product or a service separate from said scheduled service (*page 18, line 20 – page 19, line 14*).

Serial No. 09/768,458  
Group Art Unit 3677  
Docket No: ARC920000101US1

The present invention also provides for a method to enhance sales for service providers by utilizing an opportunistic approach based on an unexpected change in a schedule of service, wherein the method comprises the steps of: electronically acquiring service schedules of one or more service providers (*page 14, lines 13-17*); detecting an unexpected change in the schedule (*page 12, lines 1-2*); checking if potential customers are blocked due to the unexpected change in schedule, the blocking defining a period of inactivity (*page 12, lines 2-3*); detecting one or more potential windows of opportunities for sales to the potential customers (*page 12, lines 5-6*); checking if service providers benefit from the detected potential windows of opportunities (*page 12, lines 3-4*), and providing notification regarding the potential windows of opportunities to service providers who benefit from such information, and wherein the service providers offer a new product or service separate from the scheduled service to the potential customer during the period of inactivity (*page 12, lines 7-15*).

The present invention also provides for a method for enhancing sales for service providers by utilizing an opportunistic approach based on an unexpected change in a schedule of travel services, wherein the method comprises the steps of: extracting standardized event data comprising an actual event value and a target value from said travel service provider via a network (*figure 9, 902*); comparing, based on one or more rules from a set of first rules, the difference of said actual value and target value against a threshold value (*figure 9, 908*); detecting a window of opportunity based on one or more rules from a set of second rules (*figure 9, 910*), and distributing said window of opportunity information to said service providers for enhancing said service provider's sales, if said detection of window of opportunity occurs said sales providers providing a new product or a new service separate from said scheduled service (*page 19, lines 12-14*).

The present invention also provides for an article of manufacture comprising a computer user medium having computer readable code embodied therein which provides for a e-commerce method for enhancing sales to potential customers, wherein the article comprises: computer readable code electronically acquiring service schedules of one or more service providers (*page 19, line 20 - page 20, line 1 and page 14, lines 13-17*); computer readable code detecting an

Serial No. 09/768,458  
Group Art Unit 3677  
Docket No: ARC920000101US1

unexpected change in said schedule (*page 19, line 20 - page 20, line 1 and page 12, lines 1-2*); checking if potential customers are blocked due to said unexpected change in schedule, said blocking defining a period of inactivity (*page 19, line 20 - page 20, line 1 and page 12, lines 2-3*); computer readable code detecting one or more windows of opportunities for sales to said potential customers (*page 19, line 20 - page 20, line 1 and page 12, lines 5-6*); computer readable code checking if service providers benefit from said detected potential windows of opportunities (*page 19, line 20 - page 20, line 1 and page 12, lines 3-4*), and computer readable code providing notification regarding said potential windows of opportunities to service providers who benefit from such information, wherein said service providers offer a new product or service separate from said scheduled service to said potential customers during said period of inactivity (*page 19, line 20 - page 20, line 1 and page 12, lines 7-15*).

Serial No. 09/768,458  
Group Art Unit 3677  
Docket No: ARC920000101US1

**Grounds of Rejection to be Reviewed on Appeal:**

I. With respect to pending claims 1, 2, 5-10, 12, 15-17, 19-28, 32, and 33, was a proper rejection made under 35 U.S.C. § 102(e) using existing USPTO guidelines?

II. With respect to pending claims 3, 4, 11, 13, 18, and 29-31, was a proper rejection made under 35 U.S.C. § 103(a) using existing USPTO guidelines?



Serial No. 09/768,458  
Group Art Unit 3677  
Docket No: ARC920000101US1

**Argument:****REJECTIONS UNDER 35 U.S.C. § 102(e)**

Claims 1, 2, 5-10, 12, 15-17, 19-28, 32 and 33 stand rejected under 35 USC 102(e) as being anticipated by Conrad et al. (USP 6,810,527). To be properly rejected 35 USC 102(e), the cited reference must provide each and every claim element of a system/apparatus claim, or each and every step of a method claim. Applicants contend that the Conrad reference either explicitly or implicitly fails to provide for many of the claim limitations as required by claims 1, 2, 5-10, 12, 15-17, 19-28, 32 and 33.

Applicants wish to emphasize that it is the duty of the examiner to specifically point out limitations with respect to each and every claim element such that applicants' are aware of how the examiner is applying a reference in a rejection. In pages 2-3 of the office action of 12/29/2004, the examiner has rejected claims 1, 2, 5-10, 12, 15-17, 19-28, 32 and 33. The examiner has mixed the claim elements of independent claims 1 and 15 when providing his rejections and has failed to specifically address limitations with respect to independent claims 20 and 33. With respect to the limitations not specifically addressed by the examiner, applicants have addressed it based on their reading of the Conrad reference in its entirety.

The Conrad reference provides a content distribution and delivery system that aggregates and delivers live television content and other data content to a plurality of member aircraft operated by airlines that participate in the service. Global operations center GOC (42) delivers global live, timely content, advertisements, shows and films to the member aircraft. Content is digitized, packetized, multiplexed and addressed using one or more individual or group addresses corresponding to a plurality of distribution criteria such as aircraft number, flight number, flight phase, airline, cabin class, language, date, time of day, flight origin, flight destination, passenger demographics and other criteria. A media server system with an on-board system controller 222 is provided that receives the content, combines it with on-board stored content and generates a play-out schedule for the combined content. Advertisements may also be included with news and entertainment content distributed to aircraft on advertising slots received from sponsors of the service.

Serial No. 09/768,458  
Group Art Unit 3677  
Docket No: ARC920000101US1

By contrast, the presently claimed invention provides for a system and a method for enhancing sales for service providers by utilizing an opportunistic approach based on an unexpected change in a schedule or services (time, location). The present invention automatically identifies windows of opportunity (time, physical location), and once such a window of opportunity is detected, the invention determines whether people are affected directly from the change of a schedule. This information is then used by service providers to act quickly, in order to enhance sales. The present invention does not need to know who the affected people are, nor their preferences (profile data). Heuristics to determine a window of opportunity are based only on schedule changes, which are associated with a rule database. Thus, the present system utilizes network-based technologies and communications to generate or increase additional sales for service providers:

As an example, consider a train, which is scheduled to leave at 7:00 AM, but due to unknown circumstances the schedule is changed to 7:45 AM. There is a good chance that there are people who use this train to commute to work, and were not informed in time about this unexpected change in a scheduled event. Most of these people probably will decide to wait there until 7:45 AM, instead of investigating alternatives. The present invention's system and method identifies such unexpected events as "window of opportunities". This information is then used by service providers to deliver useful services to these waiting people in order to help them satisfy their demands or utilize their blocked time. Hence, service providers like food delivery services, newspaper delivery services, taxicab services, etc., utilize an opportunistic approach to deliver useful services for these waiting people in order to help meet their demands (e.g., by delivering food, etc.) or utilize their blocked time (e.g., by selling a magazine, providing entertainment, etc.)

Specifically, claim 1 of applicants' invention provides for a system for enhancing sales to service providers by utilizing an opportunistic approach based on unexpected change in a schedule of service. The system of applicants' claim 1 comprises an event retriever, an event observer, and a window of opportunity detector. The event retriever generates an event pair which comprises a target value and an actual value associated with the schedule of services. The event observer receives the event pairs from the event retriever, calculates the difference between

Serial No. 09/768,458  
Group Art Unit 3677  
Docket No: ARC920000101US1

the actual and target value, and based on one or more rules from a first set of rules, identifies and notifies a window of opportunity detector regarding potential windows of opportunities, wherein each potential window of opportunity defines a time period of customer inactivity. The window of opportunity detector receives potential windows of opportunities, detects, based on one more rules from a set of second rules, if a window of opportunity exists, and if so, matches the detected windows of opportunities with service providers for the purposes of providing a new product or a service separate from said scheduled service.

The examiner has equated the event retriever of claim 1 to airlines 45 of the Conrad reference. A closer reading of the citations, however, fails to teach or suggest such limitations. Airlines 45, in column 4, lines 21-22 of the Conrad reference is defined as an entity that operates "a plurality of member aircraft". Applicants' are unable to find any teaching or suggestion, either in the citations or the entire Conrad reference, for using airlines 45 to generate an event pair (e.g., [X, Y]) based on an acquired target value (e.g., a time X that a train T is scheduled to arrive) and an actual value (e.g. a time Y that the train T is actually supposed to arrive) associated with a scheduled service (e.g. train service). In response to this argument, the examiner, without any additional citations, on page 5 of the final office action states that the "airline as set forth in the Action above retrieves/extracts/acquires/posts from the fleet of aircraft all flight scheduling data to determine/generate an event pair (two items), which the Examiner interprets as an estimated and an actual time". Applicants submit that the examiner's statement with respect to claim 1's limitation of generating an event pair relies, by examiner's own admission, on the examiner's interpretation and not explicitly taught for by the Conrad reference. As stated above, there is no teaching in the Conrad reference for using airlines 45 to generate an event pair (e.g., [X, Y]) based on an acquired target value (e.g., a time X that a train T is scheduled to arrive) and an actual value (e.g. a time Y that the train T is actually supposed to arrive) associated with a scheduled service (e.g. train service). Hence, applicants contend that the examiner has erroneously equated Conrad's airlines 45 with the present inventions' event retriever without providing any discussion on how airlines 45 generate an event pair. Applicants therefore submit that the Examiner's line of argument fails to meet fundamental 35 U.S.C. §102(e) standards, as the cited reference fails to *anticipate* the "event retriever" and "event pair" limitations of applicants' pending claims.

Serial No. 09/768,458  
Group Art Unit 3677  
Docket No: ARC920000101US1

Another limitation of applicants' claim 1 is an event observer that receives such event pairs and identifies, based on a set of rules, potential windows of opportunities that define a period of customer inactivity. The examiner has equated the event observer of claim 1 to LOC 43 of the Conrad reference. A closer read of the Conrad reference, however, merely suggests that element 43 (LOC -local operations centers) delivers content to "local or global aircrafts 50 and 53" (see column 4, line 61 – column 5, line 1).

The examiner has also cited column 5, lines 49-55 of the Conrad reference as providing for the limitation of receiving the event pair from the event retriever, calculating the difference between the actual and target values and based on one or more rules from a first set of rules, identifying and notifying a window of opportunity detector of potential windows of opportunities defined as a time period of customer inactivity (for example, if an event observer receives the event pair [7:00 am, 7:45am], the calculated difference of 45 minutes is labeled as a potential window or opportunity). A closer reading of the citations, however, fails to provide such limitations. Column 5, lines 49-55 of the Conrad reference merely provide for mixing live content from sources such as news, sports, weather, etc. created for a member aircraft based on criteria (313) such as airline, aircraft, aircraft tail number, schedules arrival and departure times (with no mention of actual and target values), etc. The examiner erroneously equates the first set of rules of claim 1 with criteria 313 of the Conrad reference. Applicants submit that the Conrad reference makes no mention of receiving event pairs, calculating a difference between an actual and target value and identifying and notifying a window opportunity detector of potential windows of opportunities (defining time period of customer inactivity) based on a first set of rules. Hence, applicants submit that criteria 313 of the Conrad reference is not used to identify a window of opportunity based on a difference between an actual and target value. Absent such a showing, the Conrad reference cannot anticipate applicants' claim 1.

The examiner has also equated the window of opportunity detector of claim 1 to an on-board controller 222 of the Conrad reference. A closer read of the Conrad reference, however, merely suggests that element 222 routes incoming media and database files from satellite receiver or wireless airport network to their proper location on a media file server 218. The

Serial No. 09/768,458  
Group Art Unit 3677  
Docket No: ARC920000101US1

Conrad reference provides no recitation or suggestion of identifying and notifying a window of opportunity detector regarding potential windows of opportunity based on a period of customer inactivity.

The examiner has further cited column 11, lines 1-14 of the Conrad reference as providing for the limitation of a window of opportunity detector receiving potential windows of opportunities and detecting if a window of opportunity exists based on one or more rules from a set of second rules. The examiner also asserts that element 211 of the Conrad reference performs this step. A closer read of the Conrad reference, however, fails to teach or suggest such limitations. Column 11, lines 1-14 of the Conrad reference merely suggests using the rules for securing content to member aircrafts, for distributing content that define and control play-out schedules, and for controlling the distribution of content to various zones in a plane. Furthermore, element 211 in the Conrad reference is a receiver/decoder subsystem that allows individual passenger controlled access to content. The Conrad reference provides no recitation or suggestion of receiving potential windows of opportunities and detecting if a window of opportunity exists based on a set of rules.

The examiner also cites column 10, lines 50-53 of the Conrad reference as providing the limitations of matching and distributing detected windows of opportunity with service providers if an opportunity exists. A closer read of the Conrad reference, however fails to provide such limitations. Column 10, lines 50-53 merely suggest the distribution of content to an in-flight entertainment system according to channel schedules. The Conrad reference provides no recitation or suggestion of matching the detected windows of opportunity with service providers if an opportunity exists. The examiner cites column 15, lines 25-44 of the Conrad reference as providing limitations of providing a new product or service from service providers to passengers during the period of inactivity. Column 15, lines 25-44 of the Conrad reference merely suggests providing passengers with targeted and destination specific advertisements. However, applicants' invention requires the providing of a new product or service from service providers during the period of inactivity (for example, if a scheduled train is delayed, then, other services such as cab ride, food, magazines, etc., are offered by service providers to persons that use such a

Serial No. 09/768,458  
Group Art Unit 3677  
Docket No: ARC920000101US1

train). The Conrad reference does not provide any recitations or suggestions providing these services during the period of customer inactivity.

Based on the arguments presented above, applicants contend that independent claim 1 cannot be anticipated or rendered obvious by the Conrad reference.

Applicants' independent claim 15 provide for a method for enhancing the sales for service providers by utilizing an opportunistic approach based on an unexpected change in a schedule of service. Claim 15 comprises the steps of: electronically acquiring service schedules of one or more service providers, detecting an unexpected change in said schedule, checking if potential customers are blocked due to said unexpected change in schedule wherein blocking defines a period of inactivity, detecting one or more potential windows of opportunities for sales to said potential customers, checking if service providers benefit from said detected potential windows of opportunities, and providing notification regarding said potential windows of opportunities to service providers who benefit from such information. The service providers in claim 15 offer a new product or service separate from said scheduled service to said potential customer during the period of inactivity.

With respect to claim 15, the examiner has selectively chosen to address some elements on page 2 of the office action. Thus, applicants contend that the examiner has provided an improper rejection under 35 USC 102(e). The examiner cites column 10, lines 10-13 of the Conrad reference as providing the limitations of electronically acquiring service schedules of one or more service providers wherein providers are equated to elements 44 and 46. A closer read of the Conrad reference, however fails to provide such limitations. Column 10, lines 10-13 of the Conrad reference merely provide communication protocols that may be used for transfer of content such as advertisements/shows and not service schedules. Claim 15 of applicants' invention requires the schedule to be a service schedule (for example, a train or bus schedule). The examiner cites column 12, lines 16-26 of the Conrad reference as providing the limitations of detecting an unexpected change in a schedule. Column 12, lines 16-26 of the Conrad reference merely suggest the formation of channel schedules based on multiple inputs, for example, weather conditions, delays in landing, cancellations, etc. However, claim 15 of

Serial No. 09/768,458  
Group Art Unit 3677  
Docket No: ARC920000101US1

applicants' invention requires the active detection of change in schedule. Furthermore, claim 15 requires that a check is made to see if customers are blocked (period of inactivity) due to this change. The Conrad reference fails to teach or suggest the above limitations.

Additionally, the examiner states that the limitation of "time period of customer inactivity" can be equated to when "passengers are not moving". However, the examiner fails to show where in the Conrad reference service providers provide a new product or service separate from the scheduled service during a time period when a passenger is not moving. Absent such a showing, applicants contend that the Conrad reference cannot anticipate claim 15.

Applicants' independent claim 33 provides for an article of manufacture implementing the steps of Claim 15, wherein the sales for service providers is enhanced by utilizing an opportunistic approach based on an unexpected change in a schedule of service. Hence, the arguments set forth by the applicant for claim 15 substantially apply to claim 33 of the applicants' invention. The applicants wish to note that the examiner has failed to specifically address all elements of claim 33 in the office action dated 06/29/2005. Thus, the applicants contend that the examiner has provided an improper rejection under 35 USC 102(e).

Applicants' independent claim 20 provides for a method for enhancing the sales for service providers by utilizing an opportunistic approach based on an unexpected change in a schedule of travel services. The method of claim 20 comprises the steps of: extracting standardized event data (comprising an actual event value and a target value) from said travel service provider via a network, comparing (based on one or more rules from a set of first rules) the difference of said actual value and target value against a threshold value, detecting a window of opportunity based on one or more rules from a set of second rules, and distributing the window of opportunity information to service providers for enhancing said service providers' sales. If the window of opportunity is detected, the service providers offer the customer a new product or a new service that is different from the scheduled service.

Limitations of claim 20 are that event data comprising event value and target value are extracted from a travel service provider, windows of opportunities are detected based on a set of

Serial No. 09/768,458  
Group Art Unit 3677  
Docket No: ARC920000101US1

rules and are matched with service providers who then provide a new product or service that is different than the scheduled service. Another limitation of claim 20 is that it requires the distribution of window of opportunity information to the service providers. The Conrad reference, explicitly or implicitly, fails to teach or render obvious the limitation of extracting event data, detecting windows of opportunities based on a set of rules and establishing contact with any of the service providers based on a calculated period of inactivity.

Based on the arguments presented above, applicants contend that independent claims 15, 20 and 33 cannot be anticipated or rendered obvious by the Conrad reference.

On page 3 of the office action dated 06/29/2005, the examiner cites column 6, lines 30-35 of Conrad reference as providing the limitations of dependent claims 5 and 23 of applicants' invention. Claims 5 and 23 provide for the limitation of a threshold rule wherein potential windows of opportunities are identified based on comparing the difference between actual and target values against the threshold. A closer read of the Conrad reference, however, fails to provide such limitations. Column 6, lines 30-35 of the Conrad reference merely suggest the generation of play-out schedules for playing of content. The Conrad reference provides no recitation or suggestion of potential windows of opportunities being identified based on comparing the difference between actual and target values against the threshold.

The above-mentioned arguments for independent claims 1, 15, and 20 also substantially apply to dependent claims 5, 7, 9, 19, 22, 23, 26 and 32 as they inherit all the limitations of the claims from which they depend. Specifically, on page 3 of the office action dated 06/29/2005, the examiner cites column 6, lines 42-58 and column 7, lines 48-58 of Conrad reference as providing the limitations of dependent claims 7, 9, 19, 22, 26 and 32 of applicants' invention. Column 6, lines 42-50 of the Conrad reference merely provide the provisioning of ad slots in content that is played out to the passengers. Also, column 7, lines 48-58 provide for searching of ad slots based on criteria such as airline, region, etc. Claim 7 of applicants' invention requires that the subscription management service provide events and schedules, not advertisements. Also, dependent claims 9, 19, 22, 26 and 32 of applicants' invention provide for data events such as changes in schedules of trains, planes, buses, etc. Claims 9 and 19 disclose the data events as



Serial No. 09/768,458  
Group Art Unit 3677  
Docket No: ARC920000101US1

being iCalender events. Claim 22 discloses the data events as being arrival/departure times and locations of an airline. Claim 26 discloses the extracting of data events. Claim 32 is a dependent claim of claim 26 that also teaches the standardizing of event data based on iCalender standard. Conspicuously absent from the Conrad reference is any discussion of data events specifically iCalender events.

The above mentioned arguments for independent claims 1, 15 and 20 also substantially apply to dependent claims 2, 6, 8, 10, 12, 16, 17, 21, 24, 25, 27, and 28 as they inherit all the limitations of the claims from which they depend.

Limitations with respect to dependent claims 2, 6, 8, 10, 12, 16, 17, 21, 24, 25, 27, and 28 are not addressed anywhere in the "Claim Rejections" section of the office action. This issue was brought up in applicants' previous response. The examiner addresses this concern in the "Response to Applicants Arguments" section of the current final office action stating that the limitations of claims 2, 6, 8, 10, 12, 16, 17, 21, 24, 25, 27, and 28 are "broad inherent functions of the structure set forth in Conrad et al." and "such explanation would be obvious." Applicants respectfully disagree with this statement as it is the duty of the examiner to clearly identify specific limitations of each and every claim that is rejected as per M.P.E.P. guidelines as per §1.104(c)(2) of Title 37 of the Code of Federal Regulations and section 707 of the M.P.E.P., which explicitly states that "the particular part relied on must be designated" and "the pertinence of each reference, if not apparent, must be clearly explained and each rejected claim specified". The examiner's statement that the "explanation would be obvious" appears to suggest that without a specific statement outlining a rejection and without specific citations it should still be obvious to the applicant why claims 2, 6, 8, 10, 12, 16, 17, 21, 24, 25, 27, and 28 are rejected using the Conrad reference. Applicants respectfully disagree with this statement as this argument fails to meet fundamental M.P.E.P. guidelines by not providing the required specificity.

In the "Response to Applicants Arguments" section of the current final office action" the examiner, in addition to the above-mentioned statements, makes additional general statements without any citation or specificity when addressing claims 2, 6, 8, 10, 12, 16, 17, 21, 24, 25, 27,

Serial No. 09/768,458  
Group Art Unit 3677  
Docket No: ARC920000101US1

and 28. For example, with respect to claim 10, the examiner summarily states that "claim 10 is described above with the broad interpretation of the airline" without any detail regarding how the Conrad reference provides for an event gatherer that "dynamically receives information from service providers over a network using simulated user interaction". Similarly, the examiner states that claims 12, 17, and 27 are anticipated by figure 1 as it "characterizes a network". However, the limitation of claim 12 specifically teaches an enhanced gatherer that dynamically receives information from service providers over a network using simulated user interaction, wherein the network is a LAN, WAN, or the Internet. Applicants wish to note that just a mere recitation of a network in figure 1 of Conrad does not satisfy this limitation.

Applicants, therefore, contend that an improper §102 rejection was given by the examiner as the Conrad reference either explicitly or implicitly fails to provide for many of the claim limitations as required by claims 1, 2, 5-10, 12, 15-17, 19-28, 32 and 33.

Serial No. 09/768,458  
Group Art Unit 3677  
Docket No: ARC920000101US1

REJECTIONS UNDER 35 USC 103(a)

Claims 3, 4, 11, 13, 18 and 29-31 stand rejected under 35 USC 103(a) as being unpatentable over Conrad. To be properly rejected under U.S.C. § 103(a), each and every element of the claims must be addressed through known prior art or be recognized as an obvious variation thereof. Applicants contend that the Conrad reference fails to provide many of the limitations of applicants' pending claims.

The above mentioned arguments for independent claims 1, 15 and 20 also substantially apply to dependent claims 3, 4, 11, 13, 18, and 29-31 as they inherit all the limitations of the claims from which they depend.

The examiner merely states that it would have been obvious include XML or DTD schema within the media distribution system of Conrad et al. Applicants' contend that this statement is a mere assertion as the examiner has failed to show any teaching in the Conrad reference that would allow one of ordinary skill in the art to have modified Conrad's teaching to provide for applicants' opportunistic approach of claim 1, 15 or 20 wherein event pairs are extracted from service provider schemas in the form of DTD or XML.

Similarly, the examiner merely states that it would be obvious to achieve the operation to retrieve, interpret and execute data from computer platforms by a web crawler. Applicants' contend that this statement is a mere assertion as the examiner has failed to show any teaching in the Conrad reference that would allow one of ordinary skill in the art to have modified Conrad's teaching to provide for applicants' opportunistic approach of claim 1, 15 or 20 wherein an event retriever comprises of an enhanced gatherer that received information from service providers using simulated user interaction.

Applicants wish to contend that the examiner has failed to address the limitations of claim 18 wherein data gathering software comprises data mining software. Applicants wish to contend that the examiner has also failed to address the limitations of claim 29 wherein the web document received from a travel service provider is in any of the following formats: HTML, SGML or XML.

Serial No. 09/768,458  
Group Art Unit 3677  
Docket No: ARC920000101US1

Hence, applicants contend that an improper 35 U.S.C. 103 (a) rejection was issued with respect to claims 3, 4, 11, 13, 18 and 29-31 as these claims are not rendered obvious in view of the Conrad reference.

SUMMARY

As has been detailed above, none of the references, cited or applied, provide for the specific claimed details of applicants' presently claimed invention, nor render them obvious. It is believed that this case is in condition for allowance and reconsideration thereof and early issuance is respectfully requested.

As this Appeal Brief has been timely filed within the set period of response, no petition for extension of time or associated fee is required. However, the Commissioner is hereby authorized to charge any deficiencies in the fees provided, to include an extension of time, to Deposit Account No. 09-0441.

Respectfully submitted by  
Applicant's Representative,

*Ramraj Soundararajan*  
Ramraj Soundararajan  
Reg. No. 53,832

1725 Duke Street  
Suite 650  
Alexandria, VA 22314  
(703) 838-7683

Serial No. 09/768,458  
Group Art Unit 3677  
Docket No: ARC920000101US1

**Claims Appendix:**

1. A system for enhancing sales for service providers by utilizing an opportunistic approach based on an unexpected change in a schedule of service, said system comprising:

an event retriever, said event retriever generating an event pair which comprises a target value and an actual value associated with said schedule of services;

an event observer, said event observer receiving said event pairs from said event retriever, calculating the difference between said actual and target value, and based on one or more rules from a first set of rules, identifying and notifying a window of opportunity detector regarding potential windows of opportunities, wherein each potential window of opportunity defines a time period of customer inactivity;

said window of opportunity detector, which receives said potential windows opportunities, detects, based on one or more rules from a set of second rules, if a window of opportunity exists, and if so, matches said detected windows of opportunities with service providers for the purposes of providing a new product or a service separate from said scheduled service.

2. A system for enhancing sales for service providers by utilizing an opportunistic approach based on an unexpected change in a schedule of service, as per claim 1, wherein said event retriever further utilizes service provider schema information stored in a service provider schema database to generate said event pairs.

3. A system for enhancing sales for service providers by utilizing an opportunistic approach based on an unexpected change in a schedule of service, as per claim 2, wherein said service provider schema is a document type definition (DTD).

4. A system for enhancing sales for service providers by utilizing an opportunistic approach based on an unexpected change in a schedule of service, as per claim 2, wherein said service provider schema is an XML schema.

5. A system for enhancing sales for service providers by utilizing an opportunistic approach

Serial No. 09/768,458  
Group Art Unit 3677  
Docket No: ARC920000101US1

based on an unexpected change in a schedule of service, as per claim 1, wherein said one or more rules from said set of first rules is a threshold rule, and said potential windows of opportunities are identified based on comparing said difference between said actual and target value against said threshold.

6. A system for enhancing sales for service providers by utilizing an opportunistic approach based on an unexpected change in a schedule of service, as per claim 1, wherein said one or more rules from said set of second rules are provided externally by said service providers.

7. A system for enhancing sales for service providers by utilizing an opportunistic approach based on an unexpected change in a schedule of service, as per claim 1, wherein said system further accesses a subscription management service wherein said events and schedules are defined for tracking.

8. A system for enhancing sales for service providers by utilizing an opportunistic approach based on an unexpected change in a schedule of service, as per claim 1, wherein said one more rules of said set of first and one or more rules of a set of second rules are stored in a rule database.

9. A system for enhancing sales for service providers by utilizing an opportunistic approach based on an unexpected change in a schedule of service, as per claim 1, wherein said events are Internet Calendaring and Scheduling Core Object Specification (iCalendar) events.

10. A system for enhancing sales for service providers by utilizing an opportunistic approach based on an unexpected change in a schedule of service, as per claim 1, wherein said event retriever further comprises:

an enhanced gatherer, which dynamically receives information from service providers over a network using simulated user interaction, and

a pattern matcher, which extracts said event pair from said received information based on matching the structure of said received information with that of a stored schema of said service providers.

Page 19 of 26

Serial No. 09/768,458  
Group Art Unit 3677  
Docket No: ARC920000101US1

11. A system for enhancing sales for service providers by utilizing an opportunistic approach based on an unexpected change in a schedule of service, as per claim 10, wherein said enhanced gatherer is a web crawler.

12. A system for enhancing sales for service providers by utilizing an opportunistic approach based on an unexpected change in a schedule of service, as per claim 10, wherein said network comprises any of the following: local area networks (LANs), wide area networks (WANs), wireless networks, or the Internet.

13. A system for enhancing sales for service providers by utilizing an opportunistic approach based on an unexpected change in a schedule of service, as per claim 1, wherein said received event pairs are extracted from a markup language form.

15. A method for enhancing sales for service providers by utilizing an opportunistic approach based on an unexpected change in a schedule of service, wherein said step of detecting a window of opportunity comprises of:

electronically acquiring service schedules of one or more service providers;

detecting an unexpected change in said schedule;

checking if potential customers are blocked due to said unexpected change in schedule, said blocking defining a period of inactivity;

detecting one or more potential windows of opportunities for sales to said potential customers;

checking if service providers benefit from said detected potential windows of opportunities, and

providing notification regarding said potential windows of opportunities to service providers who benefit from such information, and

wherein said service providers offer a new product or service separate from said scheduled service to said potential customer during said period of inactivity.

16. A method for enhancing sales for service providers by utilizing an opportunistic approach

Serial No. 09/768,458  
Group Art Unit 3677  
Docket No: ARC920000101US1

based on an unexpected change in a schedule of service, as per claim 15, wherein said step of detecting an unexpected change in said schedule further comprises:

simulating user interaction via data gathering software to request data from service providers via a network;

receiving information from said service providers via said network;

accessing a service provider schema database and reading schema regarding said service providers;

matching said received information with said read schema associated with said service providers, and

extracting data events, comprising actual and target data, based on said matching step.

17. A method for enhancing sales for service providers by utilizing an opportunistic approach based on an unexpected change in a schedule of service, as per claim 16, wherein said network comprises any of the following: local area networks (LANs), wide area networks (WANs), wireless networks, or the Internet.

18. A method for enhancing sales for service providers by utilizing an opportunistic approach based on an unexpected change in a schedule of service, as per claim 15, wherein said data gathering software comprises data mining software.

19. A method for enhancing sales for service providers by utilizing an opportunistic approach based on an unexpected change in a schedule of service, as per claim 15, wherein said extracted data events are iCalendar events.

20. A method for enhancing sales for service providers by utilizing an opportunistic approach based on an unexpected change in a schedule of travel services, wherein said method comprising:

extracting standardized event data comprising an actual event value and a target value from said travel service provider via a network;

comparing, based on one or more rules from a set of first rules, the difference of said



Serial No. 09/768,458  
Group Art Unit 3677  
Docket No: ARC920000101US1

actual value and target value against a threshold value;

detecting a window of opportunity based on one or more rules from a set of second rules,  
and

distributing said window of opportunity information to said service providers for  
enhancing said service provider's sales, if said detection of window of opportunity occurs said  
sales providers providing a new product or a new service separate from said scheduled service.

21. A method for enhancing sales for service providers by utilizing an opportunistic approach  
based on an unexpected change in a schedule of travel services, as per claim 20, wherein said  
travel services comprises any of: airlines, trains, or buses.

22. A method for enhancing sales for service providers by utilizing an opportunistic approach  
based on an unexpected change in a schedule of travel services, as per claim 20, wherein said  
event data is arrival or departure times and locations associated with said specific airline.

23. A method for enhancing sales for service providers by utilizing an opportunistic approach  
based on an unexpected change in a schedule of travel services, as per claim 20, wherein said  
one or more rules from said set of first rules is based on said difference of actual and target  
values being above or below a predetermined threshold.

24. A method for enhancing sales for service providers by utilizing an opportunistic approach  
based on an unexpected change in a schedule of travel services, as per claim 20, wherein said  
one or more rules from said set of second rules is based on rules provided by service providers.

25. A method for enhancing sales for service providers by utilizing an opportunistic approach  
based on an unexpected change in a schedule of travel services, as per claim 24, wherein said  
rules provided by service providers are stored in a rules database.

26. A method for enhancing sales for service providers by utilizing an opportunistic approach  
based on an unexpected change in a schedule of travel services, as per claim 20, wherein said  
step of extracting standardized event data further comprises:

Serial No. 09/768,458  
Group Art Unit 3677  
Docket No: ARC920000101US1

accessing said travel service provider's webpage over a network;  
posting data regarding a specific travel provider in said webpage and querying for  
information regarding schedule of said specific travel service;  
receiving a web document from said travel service provider regarding said schedule of  
said specific travel provider;  
accessing a service provider schema database and reading a schema associated with said  
travel service provider;  
matching said received web document with said read schema and extracting event data,  
and  
standardizing said extracted event data.

27. A method for enhancing sales for service providers by utilizing an opportunistic approach based on an unexpected change in a schedule of travel services, as per claim 24, wherein said network comprises any of the following: local area networks (LANs), wide area networks (WANs), wireless networks, or the Internet.

28. A method for enhancing sales for service providers by utilizing an opportunistic approach based on an unexpected change in a schedule of travel services, as per claim 26, wherein said step of posting data is accomplished using a HTTP POST command.

29. A method for enhancing sales for service providers by utilizing an opportunistic approach based on an unexpected change in a schedule of travel services, as per claim 26, wherein said web document is of any of following formats: HTML, SGML, or XML.

30. A method for enhancing sales for service providers by utilizing an opportunistic approach based on an unexpected change in a schedule of travel services, as per claim 26, wherein said read schema is an XML schema.

31. A method for enhancing sales for service providers by utilizing an opportunistic approach based on an unexpected change in a schedule of travel services, as per claim 26, wherein said read schema is a DTD.

Serial No. 09/768,458  
Group Art Unit 3677  
Docket No: ARC920000101US1

32. A method for enhancing sales for service providers by utilizing an opportunistic approach based on an unexpected change in a schedule of travel services, as per claim 26, wherein said step of standardizing involves standardizing based on iCalendar standard.

33. An article of manufacture comprising a computer user medium having computer readable code embodied therein which provides for a e-commerce method for enhancing sales to potential customers, said article comprising:

computer readable code electronically acquiring service schedules of one or more service providers;

computer readable code detecting an unexpected change in said schedule;

checking if potential customers are blocked due to said unexpected change in schedule, said blocking defining a period of inactivity;

computer readable code detecting one or more windows of opportunities for sales to said potential customers;

computer readable code checking if service providers benefit from said detected potential windows of opportunities, and

computer readable code providing notification regarding said potential windows of opportunities to service providers who benefit from such information, wherein said service providers offer a new product or service separate from said scheduled service to said potential customers during said period of inactivity.

Serial No. 09/768,458  
Group Art Unit 3677  
Docket No: ARC920000101US1

**Evidence Appendix:**

None

Serial No. 09/768,458  
Group Art Unit 3677  
Docket No: ARC920000101US1

**Related Proceedings Appendix:**

None

**This Page is Inserted by IFW Indexing and Scanning  
Operations and is not part of the Official Record**

**BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ **BLACK BORDERS**
- ☐ **IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- ☐ **FADED TEXT OR DRAWING**
- ☐ **BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- ☐ **SKEWED/SLANTED IMAGES**
- ☐ **COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- ☐ **GRAY SCALE DOCUMENTS**
- ☒ **LINES OR MARKS ON ORIGINAL DOCUMENT**
- ☐ **REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**
- ☐ **OTHER:** \_\_\_\_\_

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.**